

**INDIANA DEPARTMENT OF TRANSPORTATION
OFFICE OF MATERIALS MANAGEMENT**

**PERFORMANCE GRADED BINDER
APPROVED SUPPLIER CERTIFICATION PROGRAM
ITM No. 581-08P**

1.0 SCOPE.

- 1.1** This procedure covers the requirements for participation in the Asphalt Supplier Certification (ASC) program for supplying PG binders to Department projects.
- 1.2** The values stated in either English or acceptable SI metric units are to be regarded separately as standard, as appropriate for a specification with which this ITM is used. Within the text, Metric units are shown in parenthesis. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other, without combining values in any way.
- 1.3** This ITM may involve hazardous materials, operations or equipment and may not address all of the safety problems associated with the use of the test method. The user of the ITM is responsible for establishing appropriate safety and health practices and determining the applicability of regulatory limitations prior to use.

2.0 REFERENCES.

2.1 AASHTO Standards.

M 320 Specification for Performance Graded Asphalt Binder

R 26 Standard Practice for an Approved Supplier Certification System
for Suppliers of Performance Graded Asphalt Binders

- 3.0 TERMINOLOGY.** Definitions for terms and abbreviations shall be in accordance with the Departments Standard Specifications, Section 101, and as follows:

- 3.1 PG Binder.** An asphalt-based cement that is produced from petroleum residue, either with or without the addition of non-particulate organic modifiers, meeting the requirements of AASHTO M 320 for use in HMA mixture.
- 3.2 Supplier.** A Supplier produces the final product or makes the blend or modification that alters the properties of the PG binder. A Supplier shall be a refinery, a terminal, or an HMA Producer.

- 3.3** **Manufacture.** The process in which the PG binder properties are obtained. In-line blending of unmodified PG binders or storage of PG binders is not regarded as a manufacturing process.
- 3.4** **Quality Control Plan (QCP).** A document written by the Producer that is site-specific and includes the production, policies, and procedures used by the Producer. The ASC program allows the manufacture and shipment of PG binders within the guidelines of a QCP, as outlined in AASHTO R 26, without complete pre-testing of the PG binder by the Department or the Supplier.
- 4.0** **SIGNIFICANCE AND USE.** This ITM is used to supplement the requirements of AASHTO R 26 to guide PG binder suppliers in the preparation of a QCP for the manufacture, storage, shipping, and handling of PG binders under the ASC Program.
- 5.0** **LABORATORY.** The supplier shall conduct PG binder testing in a laboratory that has been approved by the Department. Participation in the AMRL equipment inspection and proficiency sample programs with satisfactory ratings will be the basis for approval.
- 6.0** **MATERIALS TESTING.**
- 6.1** Specification compliance complete AASHTO M 320 testing shall be done at the frequency stated in the QCP per PG binder and at least once following feed stock changes. After initial testing, the minimum frequency for specification compliance testing shall be once per month.
- If the tests of the Supplier indicate that the PG binder is not within specification requirements, the Supplier shall cease shipment, immediately notify the Department, and take action to bring the material back into specification requirements. When the material is within specification requirements and is ready for shipment, the Supplier shall notify the Department.
- 6.2** The Supplier shall submit a monthly summary report of all QC tests and inspections for each PG binder supplied under the ASC program.
- 6.3** The Supplier shall maintain detailed records of QC inspections, test results and shipments for at least three years.

- 7.0 QUALITY CONTROL PLAN.** The Supplier shall submit to the Department a QCP covering each facility that manufactures or stores PG binder. The QCP shall include each PG binder to be supplied under the ASC program. Typical testing and inspection procedures shall be included for each PG binder. The requirements stated in AASHTO R 26 will be required. The QCP shall include as a minimum the following:
- 7.1** The facility type which shall be a refinery, terminal, in-line blending or HMA plant
 - 7.2** The facility location
 - 7.3** The name and telephone number of the person responsible for quality control at the facility
 - 7.4** The quality control tests to be performed on each PG binder
 - 7.5** The name and location of the laboratory performing quality control tests on the PG binder that is shipped
 - 7.6** A statement that if the quality control tests to be performed on each PG binder indicate that a shipment of PG binder is not in compliance with the specifications, the Supplier shall:
 - a)** Immediately notify the Department of the shipment in question
 - b)** Identify the material
 - c)** Cease shipment until material complies with the specifications
 - d)** Notify the Department prior to resuming shipment
 - e)** Implement procedures to dispose of the material
 - 7.7** The method and frequency for initial testing, quality control testing, and specification compliance testing
 - 7.8** A statement that the Supplier shall prepare monthly summary reports for all quality control and specification compliance tests performed during that period and shall submit the reports to the Department
 - 7.9** An outline of the procedure to be followed for checking transport vehicles before loading to prevent contamination of shipments. The outline shall include a statement that the transport vehicle inspection report, signed by the responsible inspector, shall be maintained in the Supplier's records and shall be made available to the agency on request.

7.10 If in-line blending of additives is used, the following shall be included:

- a) The procedure for sampling the binder beyond the in-line blending point
- b) The procedures for maintaining records of the proportions, based on weight (mass) or other indicator

7.11 A statement of whether or not an air blowing process is used in the manufacture of the PG binder. If air blowing is used, the relative amount of air blowing shall be stated as light, medium or heavy. Light, medium or heavy shall be defined as follows:

Air Blowing Process	
Light	1 - 2 °C increase in original DSR
Medium	3 - 4 °C increase in original DSR
Heavy	> 4 °C increase in original DSR

Heavy air blowing will not be allowed in the PG binder manufacturing process.

8.0 CERTIFICATION.

8.1 The Supplier shall submit a written request to the Manager, Office of Materials Management to supply specific PG binders under the ASC program.

8.2 A Supplier will be considered fully approved for the Department ASC program when three of the PG binders allowed by the specifications have been qualified. Limited approval will be designated for a Supplier that has less than three PG binders allowed by the specifications qualified.

8.3 A PG binder will be qualified after three consecutive production batches are tested by the Department and are in full compliance with a complete series of AASHTO M 320 tests for all samples. All qualification samples will be witnessed by the Department, provided that the facility is not located more than 60 miles outside the Indiana State line. The Supplier and the Department Representative will sign the sampling form attesting that the sample was taken properly and is representative of the PG binder material.

PG binder testing conducted by other State DOT laboratories will be considered for use in ASC approval provided that a similar sampling and testing program was used by the other State DOT.

- 8.4** Full or limited ASC approval shall be Supplier specific and shall not be transferable.

9.0 MATERIAL SHIPMENT.

- 9.1** A fully approved ASC Supplier will be allowed to supply any PG binder for which the Department has an approved QCP.
- 9.2** A limited approved ASC supplier will be allowed to supply only the PG binders that have been qualified in accordance with 8.3.
- 9.3** The Supplier shall furnish with the shipping report for each load a statement certifying that the PG binder has been manufactured according to the ASC program.
- 9.4** The Supplier shall furnish instructions with each PG binder on the proper storage and handling of the material.

10.0 DEPARTMENT RESPONSIBILITIES.

- 10.1 Certified List.** The Department will maintain the List of Approved Asphalt Suppliers that meet the requirements of the ASC program.
- 10.2 Auditing.** The Department shall be allowed to visit the Supplier location for the purpose of conducting an audit to ensure compliance with the QCP.
- 10.3 Certification Removal.** Approval to supply under the ASC program shall remain in effect until otherwise notified by the Department in writing. The removal of a Supplier from the List of Approved Asphalt Suppliers will be the responsibility of the Manager, Office of Materials Management. The Supplier shall have the right to appeal the removal from the Approved List to the Director, Construction Management Division.

Continued approval by the Department for a Supplier to supply under the ASC program shall be contingent upon a record of satisfactory performance. Unsatisfactory performance shall be defined as three consecutive production batches delivered out of specification requirements to a Department project.

A Supplier that has been removed from the ASC program for unsatisfactory performance will not be considered for ASC approval for a period of three months after the written notification.